

REMARKS/ARGUMENTS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-30 are pending in this application. In the outstanding Office Action, Claims 1, 8 and 16 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 5,703,965 to Fu and U.S. Patent No. 5,426,673 to Mitra; Claims 2-4, 12, 13, 15, 20-22 and 24 were rejected under 35 U.S.C. § 103(a) as unpatentable over Fu and Mitra and further in view of U.S. Patent No. 6,363,526 to Vlahos; Claims 9 and 17 were rejected under 35 U.S.C. § 103(a) as unpatentable over Fu and Mitra and further in view of U.S. Patent No. 6,229,578 to Acharya; Claims 5-7, 10, 11, 14, 18, 19, 23 and 25-27 were indicated as including allowable subject matter; and Claims 28-30 were allowed.

Applicants appreciate the Examiner indicating Claims 28-30 are allowed and Claims 5-7, 10, 11, 14, 18, 19, 23 and 25-27 include allowable subject matter. However, for at least the reasons set forth below, Applicants assert that all pending claims define over the art of record.

With respect to the rejection of the claims under 35 U.S.C. § 103(a) based on Fu and Mitra, independent Claims 1, 8 and 16 similarly recite, in part, obtaining density information of an edge unsharpened image from said original image by unsharpening said edge part using said edge information, obtaining coded density information by coding said density information of said edge unsharpened image, and obtaining said density information of said edge unsharpened image obtained by unsharpening said edge part of said original image. The claimed features are not rendered obvious by the applied art.

Fu discusses that the input image array is decimated in both dimensions and the decimated and optionally precompensated image array is compressed by a conventional image compression algorithm, such as JPEG. The compressed, decimated image is

transmitted via the transmission medium 104. In addition, edges are identified in the image and a file is created which identifies each of the edge pixels in the original image array, together with their color values. The edge file is encoded and transmitted to the destination and then the edge file is decoded.

As acknowledged in the outstanding Office Action, Fu does not discuss obtaining density information of an edge unsharpened image from said original image by unsharpening said edge part using said edge information, obtaining coded density information by coding said density information of said edge unsharpened image, and obtaining said density information of said edge unsharpened image obtained by unsharpening said edge part of said original image. However, the Office Action asserts that Mitra makes up for this deficiency and it would have been obvious to one of ordinary skill in the art to combine the teaching to arrive at the claimed invention. Applicants disagree.

Specifically, Fu only discusses decimating and encoding the whole image. As discussed in column 13, lines 52-56 of Fu, the JPEG compression technique tends to soften the edges (contours) of the image, and this filter re-sharpens them to improve the perceptual quality of the result. As such, Fu teaches that re-sharpening of edges is performed to recover edges that are inevitably disappeared in the coding process. Fu does not teach or suggest softening edges intentionally before coding. Mitra discusses edge-smoothing before encoding. However, there would be no motivation to one of ordinary skill in the art to modify Fu to perform edge-smoothing before encoding, as Mitra discusses. Again, Fu only discusses using edge information for sharpening edges of an image edge-unsharpened due to JPEG coding process.

The applied art, either alone or in combination, does not teach or render obvious the claimed features of unsharpening the edge part using edge information before coding image. The remaining applied art does not make up for the deficiencies of Fu and Mitra discussed

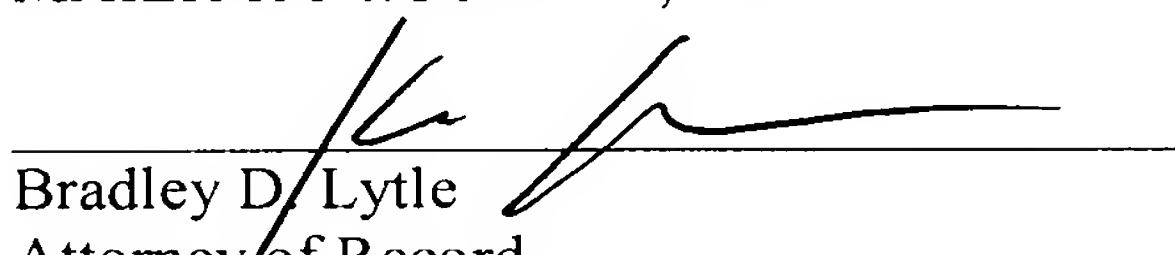
above nor does the Office Action particularly assert as such. Accordingly, withdrawal of the rejections of the claims under 35 U.S.C. § 103(a) is respectfully requested.

Consequently, for the reasons discussed in detail above, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal allowance. Therefore, a Notice of Allowance is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact the undersigned representative at the below listed telephone number.

Respectfully submitted,

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